

ABSTRACT OF THE DISCLOSURE

The method of manufacturing a semiconductor device has the steps of: etching a semiconductor substrate to form an isolation trench by using as a mask a pattern including a first silicon nitride film and having a window;

5 depositing a second silicon nitride film covering an inner surface of the isolation trench; forming a first silicon oxide film burying the isolation trench; etching and removing the first silicon oxide film in an upper region of the isolation trench; etching and removing the exposed second silicon nitride film; chemical-mechanical-polishing the second silicon oxide film; and etching and removing the

10 exposed first silicon nitride film.